

**IN THE CLAIMS:**

Please amend the claims, as follows:

Claim 1 (currently amended): Composite material (10) comprising:

a substrate (1) that is at least one of flammable and heat sensitive; and

a flame protection coating (2) on the substrate;

the flame protection coating comprising:

a base layer (3) of  $\text{TiO}_x$  applied on the substrate (1) where  $1.5 \leq x \leq 1.9$ ;

a top layer (4) of at least one of amorphous and crystalline  $\text{TiO}_2$  formed on the  $\text{TiO}_x$  base layer (3); and

wherein a total thickness of the flame protection coating (2) is in the range of 10 – 300 nm, [[and]] wherein the  $\text{TiO}_2$  top layer (4) has a thickness in the range of 10 – 50% of the total thickness of the flame protection coating, and wherein between the base layer (3) and the top layer (4) of the titanium oxide layer (2) is deposited an electrically conductive intermediate layer (5) which comprises  $\text{TiO}_x$  with an oxygen content of  $0.7 \leq x \leq 1.5$ .

Claims 2-3 (canceled).

Claim 4 (currently amended): Composite material (10) according to claim 1, characterized in that between the substrate (1) and the base layer (3) of the titanium oxide layer (2) is deposited a protective layer (7) of at least one of the metal oxides of

the group ~~comprising~~ consisting of ZnO, MgO, ZrO<sub>2</sub>, In<sub>2</sub>O<sub>3</sub>, Sb<sub>2</sub>O<sub>3</sub>, Al<sub>2</sub>O<sub>3</sub> and SiO<sub>2</sub>.

Claim 5 (currently amended): Composite material (10) according to claim 1, characterized in that the base layer (3) of TiO<sub>x</sub> is mixed with at least one additive metal oxide from the group ~~comprising~~ consisting of MgO, ZnO, ZrO<sub>2</sub>, In<sub>2</sub>O<sub>3</sub>, Sb<sub>2</sub>O<sub>3</sub>, Al<sub>2</sub>O<sub>3</sub> and SiO<sub>2</sub>, where the total proportion of all additive metal oxides remains below 50 w. %.

Claim 6 (canceled).

Claim 7 (previously presented): Composite material (10) according to claim 1, characterized in that at least the nine top atomic layers of the top layer (4) of the titanium oxide layer (2) mainly comprise the TiO<sub>2</sub> modification anatase.

Claim 8 (previously presented): Composite material (10) according to claim 1, wherein the substrate is a plastic substrate (1), characterized in that mixed with the plastic substrate (1), are finely dispersed, sub-micron filler particles (6) of a metal oxide or a metal hydroxide which dehydrates under heat.

Claims 9-11 (canceled).

Claim 12 (currently amended): Composite material (10) according to claim 1,

wherein the top layer (4) is deposited of  $\text{TiO}_2$  doped with at least one metal oxide from the group ~~comprising~~ consisting of  $\text{Fe}_2\text{O}_3$ ,  $\text{WO}_3$ ,  $\text{MnO}_2$ ,  $\text{NiO}$ ,  $\text{BaO}$  and  $\text{CaO}$ , where in total less than 7 w. % doping is added.

Claims 13-14 (canceled).

Claim 15 (previously presented): Composite material (10) according to claim 1, wherein, between the substrate (1) and the base layer (3) of the titanium oxide layer (2) is deposited a protective layer (7) of a polar adhesion.

Claim 16 (currently amended): Composite material (10) according to claim 1, wherein the base layer (3) of  $\text{TiO}_x$  is doped with at least one metal oxide of the group ~~comprising~~ consisting of  $\text{Fe}_2\text{O}_3$ ,  $\text{WO}_3$ ,  $\text{MnO}_2$ ,  $\text{NiO}$ ,  $\text{BaO}$  and  $\text{CaO}$ , where the total proportion of all metal oxides remains below 7 w. %.

Claim 17 (previously presented): Composite material (10) according to claim 1, wherein the substrate (1) comprises at least one of a polymer material and a textile material.

Claim 18 (previously presented): Composite material (10) according to claim 17, wherein the substrate (1) has opposite sides and includes said coating on both of the opposite sides.

Claim 19 (currently amended): Composite material (10) comprising:  
a substrate (1) that is at least one of flammable and heat sensitive; and  
a flame protection coating (2) on the substrate;  
the flame protection coating comprising:  
a base layer (3) of  $\text{TiO}_x(\text{OH})_y$  applied on the substrate (1), where  $1.5 \leq x < 1.9$   
and a  $0.2 \leq y < 0.7$ ;  
a top layer (4) of at least one of amorphous and crystalline  $\text{TiO}_2$  formed on the  
base layer (3); and  
wherein a total thickness of the flame protection coating (2) is in the range of 10  
– 300 nm and wherein the  $\text{TiO}_2$  top layer (4) has a thickness in the range of 10 – 50% of  
the total thickness of the flame protection coating.

Claim 20 (currently amended): Composite material (10) according to claim 19,  
characterized in that between the substrate (1) and the base layer (3) is deposited a  
protective layer (7) of at least one of the metal oxides of the group ~~comprising~~ consisting  
of  $\text{ZnO}$ ,  $\text{MgO}$ ,  $\text{ZrO}_2$ ,  $\text{In}_2\text{O}_3$ ,  $\text{Sb}_2\text{O}_3$ ,  $\text{Al}_2\text{O}_3$  and  $\text{SiO}_2$ .

Claim 21 (currently amended): Composite material (10) according to claim 19,  
characterized in that the base layer (3) is mixed with at least one metal oxide from the  
group ~~comprising~~ consisting of  $\text{MgO}$ ,  $\text{ZnO}$ ,  $\text{ZrO}_2$ ,  $\text{In}_2\text{O}_3$ ,  $\text{Sb}_2\text{O}_3$ ,  $\text{Al}_2\text{O}_3$  and  $\text{SiO}_2$ , where  
the total proportion of all metal oxides remains below 50 w. %.

Claim 22 (previously presented): Composite material (10) according to claim 19, characterized in that between the base layer (3) and the top layer (4) is deposited an electrically conductive intermediate layer (5) which comprises  $\text{TiO}_x$  with an oxygen content of  $0.7 \leq x \leq 1.5$ .

Claim 23 (previously presented): Composite material (10) according to claim 19, characterized in that at least the nine top atomic layers of the top layer (4) mainly comprise the  $\text{TiO}_2$  modification anatase.

Claim 24 (previously presented): Composite material (10) according to claim 19, wherein the substrate is a plastic substrate (1) mixed with are finely dispersed, sub-micron filler particles (6) of a metal oxide or a metal hydroxide which dehydrates under heat.

Claim 25 (currently amended): Composite material (10) according to claim 19, wherein the top layer (4) is deposited of  $\text{TiO}_2$  doped with at least one metal oxide from the group ~~comprising~~ consisting of  $\text{Fe}_2\text{O}_3$ ,  $\text{WO}_3$ ,  $\text{MnO}_2$ ,  $\text{NiO}$ ,  $\text{BaO}$  and  $\text{CaO}$ , where in total less than 7 w. % doping is added.

Claim 26 (previously presented): Composite material (10) according to claim 19, wherein, between the substrate (1) and the base layer (3) of the titanium oxide layer (2) is deposited a protective layer (7) of a polar adhesion.

Claim 27 (currently amended): Composite material (10) according to claim 19, wherein the base layer (3) is doped with at least one metal oxide of the group ~~comprising~~ consisting of  $\text{Fe}_2\text{O}_3$ ,  $\text{WO}_3$ ,  $\text{MnO}_2$ ,  $\text{NiO}$ ,  $\text{BaO}$  and  $\text{CaO}$ , where the total proportion of all metal oxides remains below 7 w. %.

Claim 28 (previously presented): Composite material (10) according to claim 19, wherein the substrate (1) comprises at least one of a polymer material and a textile material.

Claim 29 (previously presented): Composite material (10) according to claim 28, wherein the substrate (1) has opposite sides and includes said coating on both of the opposite sides.